

IV.4 REPROCESSING

It was decided to reprocess 14 lines (see table 5) in order to improve the quality of the old data, particularly of the deeper horizons, and bring them to the standard of the new data. The data was reprocessed by Digicon in Brisbane according to the flow chart shown in Figure 5.14.

Firstly, the data had to be reformatted from 21-track to conventional 9-track, 1/2 inch magnetic tape, which was performed by Geosource in Brisbane. Then the data was reformatted to Digicon internal format.

The true amplitude recovery was applied to compensate for amplitude loss due to spherical spreading of the wave-front (figure 5.15).

Deconvolution was applied in two parts. Firstly, a signature deconvolution where an operator is designed on a shot to shot basis. The output wavelet design was zero phase with bandwidth from 8 to 75 Hz. The second part was predictive deconvolution with a gap length of 12 msec and an operator of 240 msec (figure 5.18).

VELFAN programme was used to determine RMS velocity functions every 2 km (figure 5.17).

The following bandpass filter was applied to the data post stack (figure 5.16).

0.0 secs	-	10 - 60 Hz
1.4 sec	-	10 - 60 Hz
2.0 sec	-	8 - 45 Hz
3.5 sec	-	8 - 30 Hz
5.0 sec	-	8 - 30 Hz